DOCKET NO.: MSFT-3476 (147213.02) PATENT

Application No.: 10/764,612

Preliminary Amendment - First Action Not Yet Received

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A computerized system that transforms hierarchical data into a rowset, the system comprising:

a parser that parses the hierarchical data to form an active store; and

a query processor that receives a query of a database query language including a number of metaproperties and that uses the query in selecting data from the active store to form the rowset.

- 2. (Original) The computerized system of claim 1, wherein the parser comprises: a module that converts the hierarchical data to an internal representation in the active store.
- 3. (Original) The computerized system of claim 2, wherein the internal representation is a document object model (DOM).
- 4. (Original) The computerized system of claim 2, wherein the internal representation is an edge table.
- 5. (Original) The computerized system of claim 4, wherein the hierarchical data is XML data.
- 6. (Original) The computerized system of claim 2, wherein the module comprises: a module that identifies nodes in the hierarchical data.
- 7. (Original) The computerized system of claim 1, wherein the query comprises: a Structured Query Language (SQL) statement.
- 8. (Original) The computerized system of claim 7, wherein the Structured Query Language (SQL) statement comprises: a SELECT statement.
- 9. (Original) The computerized system of claim 8, wherein the query includes row information and the column information comprising: a row pattern and one or more column patterns that identifies information in the XML active store.

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10. (Original) The computerized system of claim 1, wherein the hierarchical data is XML data.

- 11. (Original) The computerized system of claim 1, wherein the hierarchical data is SGML data.
- 12. (Currently Amended) A method comprising:

identifying row and column information in hierarchical data <u>using a database query</u> <u>language; and</u>

using a number of metaproperties and the row and column information in transforming the hierarchical data into a rowset.

- 13 (Original) The method of claim 12, wherein identifying row and column information in the hierarchical data comprises: using a row pattern to identify row information in the hierarchical data; and using a column pattern to identify column information in the hierarchical data.
- 14. (Original) The method of claim 12, wherein using a number of metaproperties and the row and column information in transforming the hierarchical data into a rowset comprises: using a parent ID metaproperty in transforming the hierarchical data into a rowset.
- 15. (Original) The method of claim 14, wherein using a parent ID metaproperty in transforming the hierarchical data into a rowset comprises: using the parent ID metaproperty in forming an edge table for use in transforming the hierarchical data into a rowset.
- 16. (Original) The method of claim 12, wherein using a number of metaproperties and the row and column information in transforming the hierarchical data into a rowset comprises: using a parent ID metaproperty and a parent metaproperty in transforming the hierarchical data into a rowset.
- 17. (Original) The method of claim 12, further comprising: processing the rowset using relational techniques to form a second rowset.

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18. (Original) The method of claim 17, further comprising: transforming the second rowset into a second hierarchical data stream.

- 19. (Original) The method of claim 12, further comprising: identifying and using implicit data in transforming the hierarchical data into a rowset.
- 20. (Currently Amended) A method comprising: forming a rowset from an XML data file; and adding overflow data to the rowset to form a second rowset; and converting the second rowset into a second XML file without loss of data.
- 21. (Original) The method of claim 20, wherein forming a rowset from an XML data file comprises: forming a query including a number of metaproperties; and processing the XML data file using the query to form the rowset.
- 22. (Original) The method of claim 21, wherein adding overflow data to the rowset to form a second rowset comprises: adding a column to the rowset in which to include the overflow data.
- 23. (Currently Amended) A method comprising: converting a first hierarchical data stream into a rowset via a database query language; and inserting information into the rowset; and

converting the rowset back into a second hierarchical data stream without loss of data.

- 24. (Original) The method of claim 23, wherein converting the rowset back into a second hierarchical data stream without loss of data comprises: using a number of metaproperties in converting the rowset back into the second hierarchical data stream.
- 25. (Amended) A method comprising: <u>via commands of a database query language</u>, receiving a rowset; and using a number of metaproperties in transforming the rowset into an XML data file.
- 26. (Original) The method of claim 25, wherein receiving a rowset comprises: receiving a rowset including overflow data.

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27. (Original) The method of claim 25, further comprising: transmitting the XML data file.

- 28. (Original) The method of claim 25, wherein receiving a rowset comprises: receiving a rowset having a first data field associated with an ID metaproperty and a second data field associated with the ID metaproperty.
- 29. (Original) The method of claim 28, wherein using a number of metaproperties in transforming the rowset into XML data comprises: fusing the first data field to the second data field in the process of converting the rowset into an XML data file.
- 30. (Currently Amended) A computer-readable medium having computer-executable instructions for performing operations comprising:

via commands of a database query language, using a number of metaproperties associated with a rowset to convert the rowset to an XML active store; and converting the XML active store to form XML formatted information.

- 31. (Original) The computerized system of claim 30, further comprising: an XML formatter for transforming the active store to a second XML data file.
- 32. (Currently Amended) A computer-readable medium having computer-executable instructions for performing operations comprising:

using a database query language, converting a first XML data stream into a rowset; inserting information having metaproperties into the rowset; and converting the rowset back into a second XML data stream without loss of data.

33. (Currently Amended) A computer-readable medium having computer-executable instructions for performing operations comprising:

<u>via commands of a database query language</u>, identifying row and column information in a hierarchical data stream; and

using implicit information and the row and column information in transforming the hierarchical data stream into a rowset.

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- 34. (Original) The computer-readable medium of claim 33, wherein the hierarchical data stream is an XML data stream.
- 35. (Original) The computer readable medium of claim 33, wherein the hierarchical data stream is an SGML data stream.
- 36. (Original) The computer readable medium of claim 33, wherein the hierarchical data stream is derived from data capable of being represented in a graph.
- 37. (Currently Amended) A computerized system for transforming hierarchical data into a rowset, the system comprising:

means for parsing the hierarchical data to form an active store; and means for receiving a query of a database query language including a number of metaproperties and for using the query in selecting data from the active store to form the rowset.

- 38. (New) A system according to claim 1, wherein the database query language is the structured query language (SQL).
- 39. (New) A method according to claim 12, further comprising: using a number of metaproperties and the row and column information in transforming the hierarchical data into a rowset.
- 40. (New) A method according to claim 12, wherein the database query language is the structured query language (SQL).
- 41. (New) A method according to claim 20, further comprising: converting the second rowset into a second XML file without loss of data.
- 42. (New) A method according to claim 23, further comprising: converting the rowset back into a second hierarchical data stream without loss of data.
- 43. (New) A method according to claim 23, wherein the database query language is the structured query language (SQL).

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44. (New) A method according to claim 25, wherein the database query language is the structured query language (SQL).

- 45. (New) A method according to claim 30, wherein the database query language is the structured query language (SQL).
- 46. (New) A method according to claim 32, further comprising: converting the rowset back into a second XML data stream without loss of data.
- 47. (New) A method according to claim 32, wherein the database query language is the structured query language (SQL).
- 48. (New) A method according to claim 33, wherein the database query language is the structured query language (SQL).
- 49. (New) A method according to claim 37, wherein the database query language is the structured query language (SQL).